



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,973	03/31/2004	Frank Dumont	PA030012	5919
24498	7590	11/28/2008		
Joseph J. Laks				
Thomson Licensing LLC				
2 Independence Way, Patent Operations				
PO Box 5312				
PRINCETON, NJ 08543				
EXAMINER				
TRAN, TRANG U				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
11/28/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/813,973

**Applicant(s)**

DUMONT ET AL.

**Examiner**

Trang U. Tran

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed July 31, 2008 have been fully considered but they are not persuasive.

In re pages 4-7, applicants argue that Oya and Perlman, alone or in combination, fail to disclose "processing means receiving the video signal and outputting an encoded stream based on the video signal" or "control means for adjusting the processing means based on the indicator" as recited in claim 1.

In response, the examiner respectfully disagrees. Oya discloses in the abstract that "Optimal RF AGC points are individually set for a terrestrial digital television signal and a CATV digital signal. A switch is changed according to whether an input signal is a terrestrial digital television signal or a CATV digital signal. If the terrestrial digital television signal is input, the voltage for setting the RF AGC point is set to a reference voltage V1 output from a first reference power supply source. If the CATV digital signal is input, the voltage for setting the RF AGC point is set to a reference voltage V2 output from a second reference power supply source. A comparator then outputs an RF AGC signal according to a difference between an IF AGC signal and the reference voltage". From the abstract, it is clear that the comparator adjusts the processing means (RF AGC) based on the indicator (whether an input signal is a terrestrial digital television signal or a CATV digital signal). Thus, Oya does disclose the claimed "control means for adjusting the processing means based on the indicator" as recited in claim 1.

Perlman et al discloses in page 4, paragraph #0044 and #0045 that "In one embodiment, a separate set of analog modules 911 may be included in the system to process and store legacy analog broadcasts. The analog components may include an analog tuners 902 for receiving the analog broadcast at a particular frequency, a decoder/digitizer module 904 for decoding and performing A/D conversion on the analog signal, and a compression module 906 for compressing the signal before storing it to the mass storage device 460" and "In one embodiment, the digital components may be configured to provide the analog functionality just described. For example, the DSPs within the QAM/DPSK module 935 may be programmed with an NTSC or PAL demodulation function for demodulating the incoming analog signal 901 (i.e., after the signal is digitized via the A/D converter)". The claimed "processing means receiving the video signal and outputting an encoded stream based on the video signal" is met by the compression module 906 of Perlman et al. Additionally, in order to record the digital video signal on the recording medium, there must be an encoder such as digital modulator or error encoder. The claimed "processing means receiving the video signal and outputting an encoded stream based on the video signal" is also an inherent characteristic of the recorder of Perlman et al. Thus, the combination of Oya and Perlman et al discloses all the claimed limitations of claim 1.

***Claim Rejections - 35 USC 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section discloses all the claimed subject matter, note 1) the claimed of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Perlman et al (US Pub 2007/0147406 A1).

In considering claim 1, Oya discloses all the claimed subject matter, note 1) the claimed a receiver for converting an RF signal into a video signal is met by the digital television signal receiver (Fig. 3, col. 3, line 62 to col. 4, line 50), 2) the claimed processing means receiving the video signal and outputting an encoded stream based on the video signal is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50), 3) the claimed an indicator of a characteristic of the RF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50), and 4) the claimed control means for adjusting the processing means based in the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32). However, Oya does not specifically disclose the newly added limitation that the processing means receives the video signal and outputs a compression encoded stream.

Perlman et al teaches that a television receiver having compression module for compressing the signal before storing it to the mass storage device (Fig. 9, element 906, page 4, paragraph #0044).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the compression module as taught by Perlman et al into Oya's system in order to reduce the bandwidth of the video signal to be transmitted, to reduce

time in transmitting the video signal, or increase the storage capacity when storing the video signal into memory.

In considering claim 2, the claimed wherein the processing means includes an adjustable filter and wherein the control means includes means for adjusting the adjustable filter based on the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

In considering claim 3, the claimed wherein the receiver outputs the video signal as an analogue signal and wherein a video decoder converts the analogue signal into a digital stream is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50).

In considering claim 4, the claimed wherein the video decoder comprises the adjustable filter is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50).

In considering claim 6, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

In considering claim 7, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50).

In considering claim 8, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50).

In considering claim 9, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32).

In considering claim 10, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32).

4. Claims 5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Perlman et al (US Pub 2007/0147406 A1) as applied to claims 1-4 and 6-10 above, and further in view of Krishnamurthy et al. (US Patent No. 5,508,748).

In considering claim 5, the proposed combination of Oya and Perlman et al discloses all the limitations of the instant inventions as discussed in claim 1 above, except for providing the claimed wherein the processing means includes an encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator. Krishnamurthy et al teach that the offset 10-bits symbols are then applied through frame formatter 15 to D/A converter 16 where they are converted to analog form for transmission by VSB transmitter 17, also, it will be observed that the data rate characterizing each VSB mode increases by one bit per symbol relative to the data rate of the immediately lower VSB mode while its S/N ratio performance is reduced by one-half (col. 3, col. 4, line 7 to col. 5, line 55). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the encoded bit-rate as taught by Krishnamurthy et al into Oya's

system in order to provide a simplified level selection system for transmission and reception of a digital information signal having a variable data constellation.

In considering claim 11, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32 of Oya).

In considering claim 12, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 13, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 14, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

In considering claim 15, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

### ***Conclusion***



5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 9:00 AM - 6:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 24, 2008

/Trang U. Tran/  
Primary Examiner, Art Unit 2622